

ORIGINAL ARTICLE

PERCEPTIONS OF PEOPLE LIVING WITH HIV/AIDS

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ABSTRACT

BACKGROUND: HIV/AIDS being a behavioral disease, appropriate knowledge is important for those who are infected. **OBJECTIVES:** To elicit and compare knowledge and attitude about HIV/AIDS among newly diagnosed and previously diagnosed HIV/AIDS patients attending or admitted in Calcutta School of Tropical Medicine, (CSTM), Kolkata. **MATERIALS AND METHODS:** A cross-sectional descriptive study was undertaken among previously diagnosed HIV/AIDS patients admitted in indoor wards and newly diagnosed HIV/AIDS patients attending Integrated Counseling and Testing Centre (ICTC) of the School of Tropical Medicine, Kolkata. Data were gathered by interviewing patients using a predesigned, pretested, semi-structured questionnaire. **RESULTS:** More in-patients had heard about AIDS than ICTC patients. Television was the most popular source of information in both groups, followed by health personnel and friends. Correct knowledge about transmission, symptoms, prevention of AIDS, and lifestyles desirable for affected patients was significantly higher among in-patients who had already been counseled, than the newly diagnosed ICTC patients yet to receive. Within each group of patients, the knowledge score was significantly higher among females, Christians, urban residents, patients educated beyond middle school, and non-migrants. In-patients had a significantly higher attitudinal score toward HIV/AIDS. **CONCLUSION:** Repeated counseling is required to keep up high level of knowledge and positive attitude pertaining to HIV/AIDS to reduce risk behavior, prevent disease transmission, and improve quality of life.

Key words: Counseling, ICTC, knowledge-attitude, life-style, PLWHAs

INTRODUCTION

Since specific behaviors are associated with a high risk for AIDS, individuals need to be

encouraged to take responsibility for both prevention and transmission of AIDS.^[1] In many cases, there is a prevalent belief that one is not at risk by having only one partner, due to unawareness of other risk factors, such

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as past sexual history and partners having other partners.^[2] Also, as members of society, People Living with HIV/AIDS (PLWHAs) have obligations to use the knowledge to help prevent further spread of disease. The possible physical, psychological, social, and moral harm done by not providing information and equipment to PLWHAs must be considered. Thus, education and counseling of PLWHAs should be an important component of AIDS management, as effective anti-retroviral therapy alone will not stem the HIV epidemic. Thus, greater involvement of the PLWHAs is urgently needed. Against this background, the present study was undertaken to elicit and compare the knowledge, and attitude about HIV/AIDS among HIV/AIDS patients newly diagnosed from the people attending the Integrated Counseling and Testing Centre (ICTC) and old patients living with HIV/AIDS admitted in the in-patient-department (IPD) of the Calcutta School of Tropical Medicine (CSTM), Kolkata.

MATERIALS AND METHODS

A hospital-based cross-sectional, observational study was carried out for a period for 6 months from May 2008 to October 2008 in the department of Tropical Medicine, CSTM, Kolkata, involving the following study subjects

Patients attending the ICTC at the Department of Virology, CSTM, and diagnosed to be HIV infected (new patients).

Patients with AIDS (diagnosed at least before 6 months) admitted in IPD of CSTM; (in-patients).

A total of 288 PLWAs (198 newly diagnosed from ICTC plus 90 in-patients) were selected

after obtaining informed consent and assuring both anonymity and confidentiality. A pre-designed, pretested, semi-structured questionnaire prepared in English and translated in Bengali was used for collection of information.

Method of data collection

Patients attending ICTC were interviewed at the time of pre-test counseling in the presence of a trained counselor. The HIV sero status of these patients was determined at this center using ELISA. Positive results were confirmed by two consecutive rapid tests. Western Blot test confirmed discrepant results. Although all ICTC patients were interviewed during pre-test counseling, only those with final HIV-positive status were included in the study.

All indoor patients with HIV/AIDS admitted during the study period were interviewed in the same manner with similar instrument. Moribund patients were not considered.

RESULTS

Analysis revealed that all 90 (100.0%) inpatients interviewed, had heard about AIDS compared to 171 out of 200 ICTC patients (85.5%) and this difference was statistically significant ($z = 5.82$, $P = 0.0010$). Television was the most important source of information in both indoor (88.9%) and ICTC (85.4%) patient groups. The next important source of information was health personnel, cited by 53.3% of indoor patients, compared to 29.2% of new patients, and the difference was statistically significant ($z = 3.83$, $P = 0.0010$). Other important sources were friends, radio, and newspapers in both groups. Knowledge

regarding mode of transmission of HIV/AIDS [Table 1] was significantly higher among the indoor patients. Of the 90 indoor patients who had heard about AIDS, 42 (46.7%) were aware of some symptoms associated with AIDS, compared to 36 (21.1%) of 171 ICTC patients ($z = 4.18$, $P = 0.001$). However, knowledge

about specific signs and symptoms was better among the newly diagnosed patients [Table 2]. Analysis further revealed higher knowledge among the inpatients about the lifestyles to be adopted by HIV/AIDS patients [Table 3] as reflected by statistically significant ($z = 6.13$, $P = 0.000$) higher knowledge

Table 1: Correct knowledge of PLWHAs about transmission of HIV/AIDS (Multiple Response)

Mode of transmission	Indoor patients (n = 90)		ICTC Patients (n = 171)		Z	P
	No.	%	No.	%		
Sex with HIV infected person	90	100	155	90.6	2.73	0.003
Sex with multiple partners without using condoms	76	84.4	82	48.0	5.59	0.0000
Sex with unknown person	80	88.9	149	87.1	0.22	0.41
Infected mother to child	56	63.2	33	19.3	6.96	0.0000
Receiving blood products	80	88.9	101	59.1	4.83	0.0000
Using infected razor blades	50	55.6	50	29.2	4.02	0.0000
Using un-sterile needle and syringes	76	84.4	101	59.1	4.03	0.00028

Table 2: Distribution of PLWHAs by knowledge of signs and symptoms of HIV/AIDS (Multiple Response)

Knowledge regarding specific signs and symptoms of HIV/AIDS	Indoor patient (n ₁ = 90)		ICTC Patient (n ₂ = 171)		Z	P
	Total No.	Correct response	Total No.	Correct response		
Weakness	42	12 (28.6)	36	12 (33.3)	0.21	0.4175
Weight loss	42	20 (47.6)	36	26 (72.2)	1.97	0.0243
Fever > 1 month	42	32 (76.2)	36	30 (83.3)	0.5	0.3093
Persistent diarrhea	42	16 (38.1)	36	15 (41.7)	0.09	0.4644
Persistent cough with fever	42	10 (23.8)	36	----	---	---
Others	42	----	36	10 (27.8)	----	----

Figure in parenthesis indicates percentages

Table 3: Distribution of PLWHAs by knowledge of life styles to be adopted by them (Multiple Response)

Knowledge of lifestyle to be adopted by HIV/AIDS patients	Indoor patient (n = 90)		ICTC patient (n = 171)		Z	P
	Correct response		Correct response			
	No.	%	No.	%		
Drink boiled water	80	88.9	35	20.5	10.45	0.0000
Eat balanced, nutritious diet	80	88.9	47	27.5	9.30	0.0000
Avoid junk, tinned, processed, roadside food; colas	50	55.5	15	8.8	8.16	0.0000
Stay as active as possible and continue to work if possible	32	35.6	34	19.9	2.62	0.004
Get enough rest and sleep	70	77.8	140	81.9	0.63	0.2648
Practice safe sex by abstinence	38	42.2	28	16.4	4.42	0.0005
Practice safe sex by using condoms	66	73.3	54	31.6	6.30	0.0000
Avoid alcohol, tobacco, and other drugs	66	73.3	124	72.5	-	-
Practice family planning	50	55.6	62	36.3	2.86	0.002
Do not donate blood	76	84.4	88	51.5	5.11	0.0000
Don't share needles, syringes, or razor blades with anyone	27	60	92	53.8	3.54	0.0002

score (Mean $\pm$ sd = 16.39 $\pm$ 7.56, Range 0 to 33) compared to their newly diagnosed counterpart (10.01 $\pm$ 8.74, Range -2 to 31). Within each group the knowledge score was found to be higher in females, age greater than 35 years, educated beyond middle school, Christians, and those without history of migration [Table 4]. It was also observed that higher proportion of the inpatients had favorable attitude about HIV/ AIDS [Table 5]. This was substantiated by the fact that the maximum attitudinal score was attained by 34.8% in-patients compared to only 17.0% ICTC patients and the difference in the attitude score between the groups (5.91 $\pm$ 2.25 vs 4.47 $\pm$ 2.27) was statistically significant.

DISCUSSION

The higher level of awareness and attitude among the in-patients could be attributed to the fact that they had all received repeated

counseling while the ICTC patients had not. Therefore, the awareness status of ICTC patients may be compared with findings of

Table 4: Knowledge score and socio-demographic profile of PLWHAS (Maximum Obtainable Score = 35)

Socio demographic factors	Score of patients		Z	P
	Indoor (n ₁ = 90)	ICTC (n ₂ = 171)		
Gender				
Male	15.92	9.48	5.808	0.000
Female	18.33	11.06	2.753	0.007
Age				
< 35 years	14.88	10.20	3.009	0.001
$\geq$ 35 years	18.35	9.7	5.425	0.000
Religion				
Hindu	16.51	10.24	5.312	0.000
Muslim	13.40	8.35	2.00	0.000
Christian	21.50	12.22	1.572	0.144
Migration				
Present	15.78	9.79	4.219	0.000
No H/O Migration	17.00	10.23	4.2987	0.000
Education				
< Middle school	14.35	8.05	4.082	0.000
$\geq$ Middle school	17.59	11.71	4.185	0.000

Table 5: Distribution of people living with HIV/AIDS by attitude toward HIV/AIDS (Multiple Response)

Attitude statements	Indoor patients (n ₁ = 90)			ICTC patients (n ₂ = 171)		
	Agree No. (%)	Disagree No. (%)	Undecided No. (%)	Agree No. (%)	Disagree No. (%)	Undecided No. (%)
No need to use condoms as risk of HIV transmission by sexual route is low	6 (6.7)	56 (62.2)	28 (31.1)	6 (3.5)	60 (35.1)	105 (61.4)
Chance of STD/HIV increases with multiple sex partners	78 (86.7)	---	12 (13.3)	131 (76.6)	1 (0.6)	39 (22.8)
HIV positive spouse should be divorced	2 (2.2)	84 (93.3)	4 (4.5)	12 (7.0)	120 (70.2)	39 (22.8)
Young people should know about HIV/AIDS prevention	82 (91.1)	2 (2.2)	6 (6.7)	146 (85.4)	1 (0.6)	24 (14.0)
Partner / child should be tested for HIV	74 (82.2)	---	16 (17.8)	93 (54.4)	1 (0.6)	77 (45.0)
HIV patient should be isolated	2 (2.2)	62 (68.9)	26 (28.9)	9 (5.3)	67 (39.2)	95 (55.6)
HIV status should be disclosed to friends	12 (13.3)	66 (73.4)	12 (13.3)	5 (2.9)	96 (56.2)	70 (40.9)
It's right to disclose to spouse if test HIV(+ve)	69 (76.7)	4 (4.4)	17 (18.9)	120 (70.2)	3 (1.8)	46 (26.9)

other studies conducted in general population. Study in Andhra Pradesh^[3] found that overall 79.25% of the population had heard of AIDS. A study in Calcutta^[4] among English-speaking adults showed 87% men and 99% women had heard of AIDS. A study at New Delhi^[5] revealed that 78.7% male STD patients had heard about AIDS. A study among auto-rickshaw drivers in Aurangabad showed that 88% had heard about the disease.^[6] According to a national baseline behavior surveillance survey (BSS) by NACO,^[7] overall 76.1% (82.4% Males and 70% females) of the population had heard about HIV/AIDS. Similar results, 85.5% of newly diagnosed patients (86.4% males, 83.6% females) having heard of AIDS, reflected by present study. The higher level of awareness among females could be explained by the fact that the husband of many of them were already suffering from the disease and they came to know about the disease, even before receiving counseling, from health workers. The health personnel imparted knowledge regarding AIDS to about 30% of the participants could be due to their frequent contact with health personnel either as patients, who already received counseling, or as the spouse of AIDS victims. Other studies have also cited Television and friends as important sources of information.^[3-6]

The Calcutta^[4] study among the English speaking adults found that AIDS could be transmitted through sexual intercourse, from infected mother to newborn child, by contaminated needles, and via infected blood were known to 95%, 55.6%, 81%, and 83.1% of respondents. The corresponding figures among the newly diagnosed HIV patients in the present study were 90.6%,

19.3%, 59.1%, and 59.1%, respectively. The lower level of knowledge in the present study could be attributed to lower literacy level of the respondents than that of the reference study. A study in a slum of south Kolkata^[8] showed that 71.4% participants were aware of AIDS; 54.4% and 40.8% knew that it could be prevented and could not be cured, respectively. More than half of the respondents of the present study associated AIDS with promiscuity (54.9%) and prostitution (52.9%). As per NACO,^[7] more than 3 out of 4 people, 72.5% and 54.4% participants reportedly knew that HIV/AIDS could be transmitted by sexual route, by infected blood, and via breastfeeding.

Only 20% of indoor and 2.9% of ICTC patients knew that a person with HIV infection could give a negative blood test. This poor response is definitely alarming and so the concept about window period of HIV infection needs to be strengthened.

Better knowledge about specific signs and symptoms among the newly diagnosed patients could be explained by the fact that many of the new patients attending the ICTC were wives of PLWHAs.

Knowledge about AIDS prevention by using condom and having sex with faithful uninfected partner were found to be present among 36.3% and 26.9% of ICTC patients which were far below the respective values among indoor patients (77.8% and 42.2%) and even less than the observations of NACO,^[7] where overall 46.8% of respondents knew that consistent condom use and sex with faithful uninfected partner were the two important methods of prevention.

As expected, the knowledge about lifestyles to be adopted by HIV/AIDS patients was significantly higher among the in-patients, who had been counseled [Table 3]. Repeated counseling of HIV/AIDS patients is very important for empowering them to lead a socially and economically productive life by taking care of their own as it is not possible for resource poor countries to provide ongoing care in all respects. That continuous counseling does help in bringing about substantial changes in knowledge-attitude and practices against HIV/AIDS has been found in similar study.^[9]

Like the present study, other studies have also shown higher awareness among urban respondents,^[3] females, education beyond high school, Hindus.^[4] A study^[10] among OPD patients at Vellore found that ignorance about AIDS was associated with female sex, living in rural area, illiteracy and lower socio-economic status. When females were excluded as a confounder, the lack of knowledge among males was associated with illiteracy ($P < 0.05$), lower socio-economic class ($P < 0.05$), living in rural areas ($P < 0.05$). Among women, it was associated with illiteracy ($P < 0.001$).

CONCLUSIONS

It was evident from the present study that there is a vast scope for improvement of knowledge, attitude and practice of the PLWHAs leading to change in behavior congenial for their survival and society. So, repeated follow up counseling of PLWHAs and their spouses can be used to improve quality of life and prevent spread of the disease. Information, education and

communication (IEC) activities must be stepped up in the community to remove the stigma associated with the disease. For this purpose, a multisectoral approach led by health department, PLWHA networks, and NGOs is the need of the hour.

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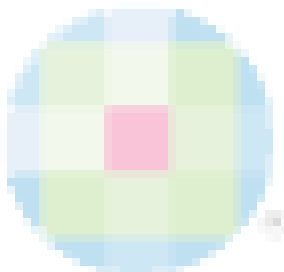
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